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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,231	11/25/2005	Ofer Mandelboim	2488.019	8744
23405 7590 11/29/2007 HESLIN ROTHENBERG FARLEY & MESITI PC 5 COLUMBIA CIRCLE ALBANY, NY 12203			EXAMINER DAVIS, MINH TAM B	
			ART UNIT	PAPER NUMBER
			1642	
			MAIL DATE	DELIVERY MODE
			11/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/538,231

Applicant(s)

MANDELBOIM ET AL.

Examiner

MINH-TAM DAVIS

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-44 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-5, 19-23, drawn to a polypeptide conjugate (SEQ ID NO:4) comprising NKp30 and a cytotoxic agent or an Ig molecule.

Group 2, claim(s) 6-18, drawn to a polynucleotide encoding a polypeptide conjugate (SEQ ID NO:4) comprising NKp30 and a cytotoxic agent or an Ig molecule.

Groups 3-6, claims 24-32, 34-40, 42, drawn to a method for treating a solid tumor, which is a carcinoma, melanoma, glioma or neuroblastoma, using NKp30 conjugate SEQ ID NO:4. A method for treating each tumor constitutes a single, distinct invention.

Group 7-8, claims 24-31, 33-39, 41-42, drawn to a method for treating a non-solid tumor, which is lymphoma or leukemia, using NKp30 conjugate SEQ ID NO:4. A method for treating each tumor constitutes a single, distinct invention.

Groups 9-20, claims 24, 27-28, 31, 34-36, 38-40, 42-43, drawn to a method for treating a solid tumor, which is a carcinoma, melanoma, glioma or neuroblastoma, using the conjugate SEQ ID NO:1-3. A method for treating each tumor, using each polypeptide conjugate constitutes a single, distinct invention.

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Groups 21-26, claims 24, 27-28, 31, 34-36, 38-39, 41-43, drawn to a method for treating a non- solid tumor, which is lymphoma or leukemia, using the conjugate SEQ ID NO: 1-3. A method for treating each tumor, using each polypeptide conjugate constitutes a single, distinct invention.

Groups 27-38, claims 24, 27-28, 31, 34-36, 38-40, 42, 44, drawn to a method for treating a solid tumor, which is a carcinoma, melanoma, glioma or neuroblastoma, using the conjugate SEQ ID NO: 5-7. A method for treating each tumor, using each polypeptide conjugate constitutes a single, distinct invention.

Groups 39-42, claims 24, 27-28, 31, 34-36, 38-39, 41-42, 44, drawn to a method for treating a non- solid tumor, which is lymphoma or leukemia, using the conjugate SEQ ID NO: 5-7. A method for treating each tumor, using each polypeptide conjugate constitutes a single, distinct invention.

In addition, Groups 1-42 are also subjected to the following patentably distinct **species** of the claimed invention:

A cytotoxic agent or an immunoglobulin molecule.

The inventions are distinct, each from the other because of the following reasons:

According to PCT Rule 13.2, unity of invention exists only when the shared same or corresponding technical feature is a contribution over the prior art. The inventions listed as groups 1-42 do not relate to a single general inventive concept because they lack the same or corresponding special technical feature. The technical feature of group I, a conjugate of NKp30 and an immunoglobulin, is shown to be the same as an antibody that binds to and cross-links NKp30, as taught by US 2002/0142445 A1 (para 0004, 0025, 0077-0082) or Pende et al, 1999 ( J

Exp Med, 190: 1501-1516, especially p. 1512, second column), and thus lacks novelty and does not make a contribution over the prior art.

Applicants are required under 35 USC 121 to elect a single disclosed group for prosecution on the merits to which the claims shall be restricted, even though the requirement be traversed (37 CFR 1.143).

If any one of groups 1-42 is selected, Applicant is further required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits, and a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-TAM DAVIS whose telephone number is 571-272-0830. The examiner can normally be reached on 9:00 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LARRY HELMS can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MINH TAM DAVIS  
November 09, 2007

/Larry R. Helms/

Supervisory Patent Examiner